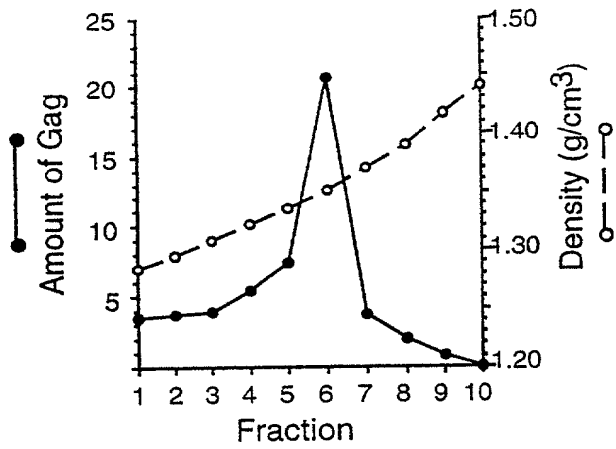
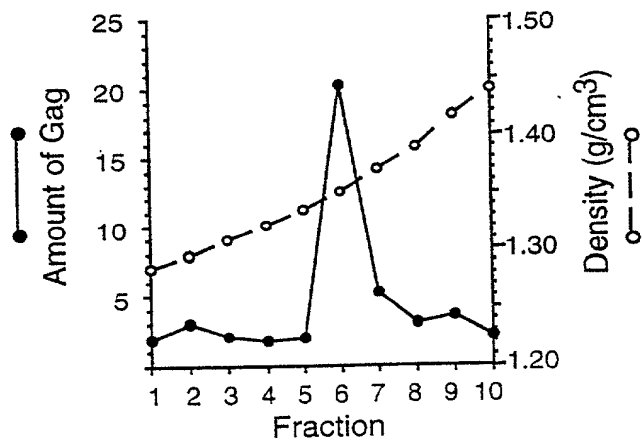
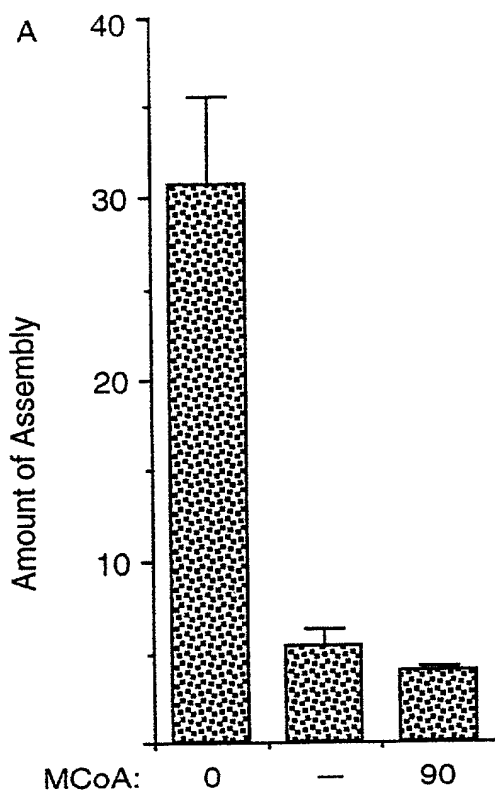


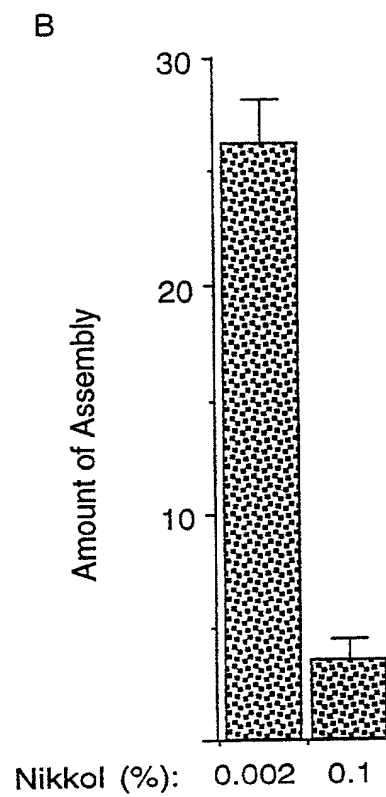
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**Fig. 1A****Fig. 1B**

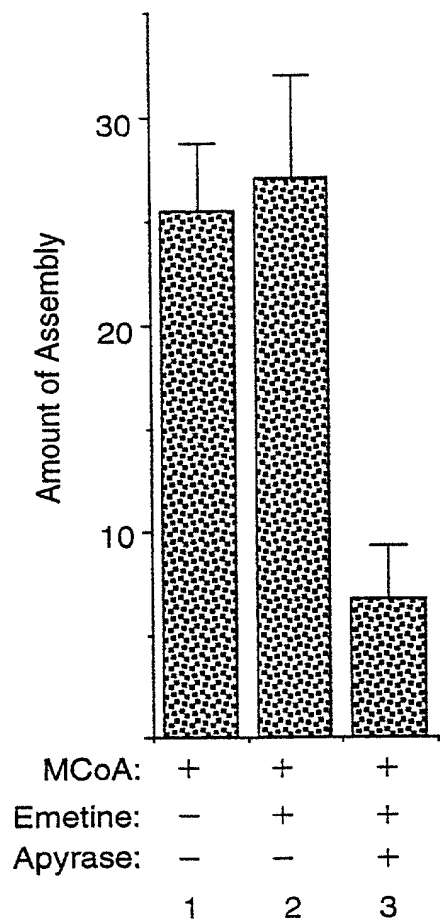
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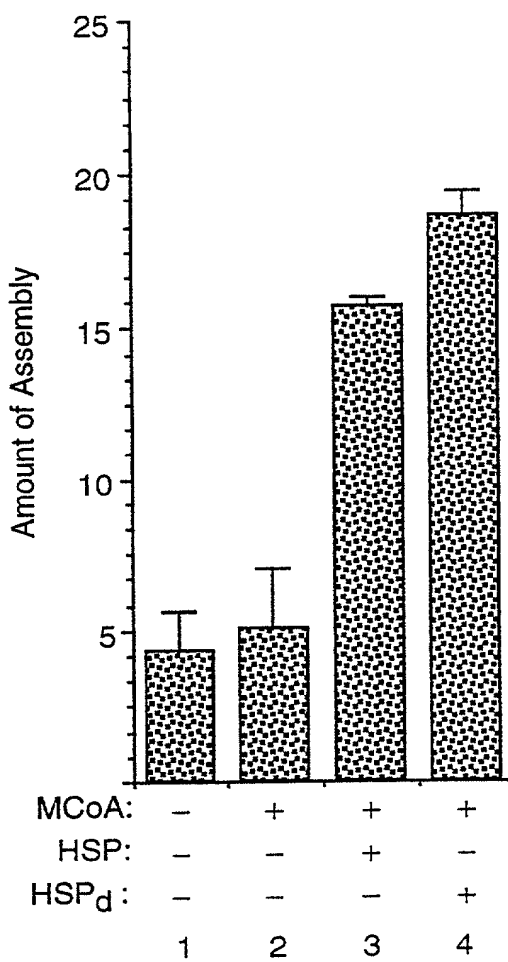
**Fig. 2A**



**Fig. 2B**

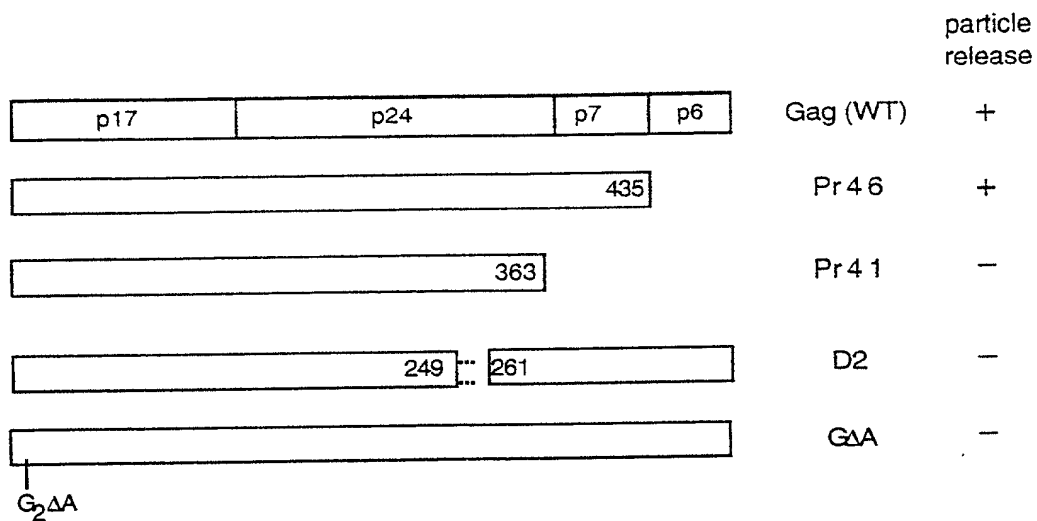


**Fig. 3A**

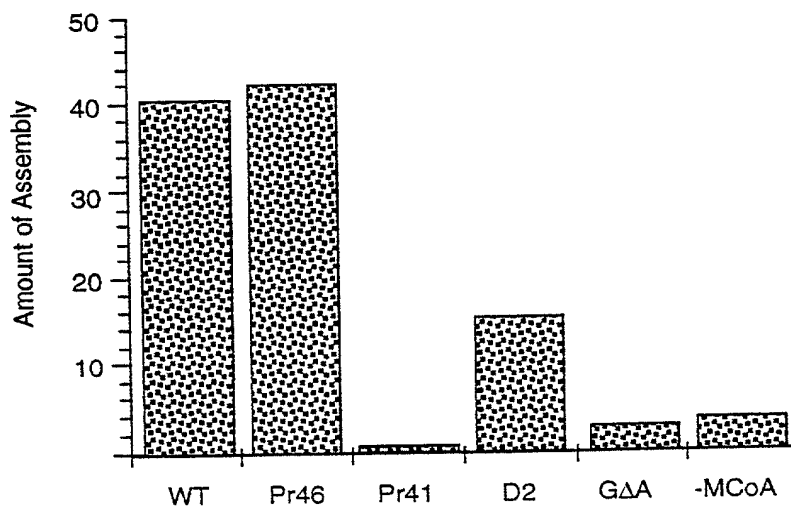


**Fig. 3B**

+

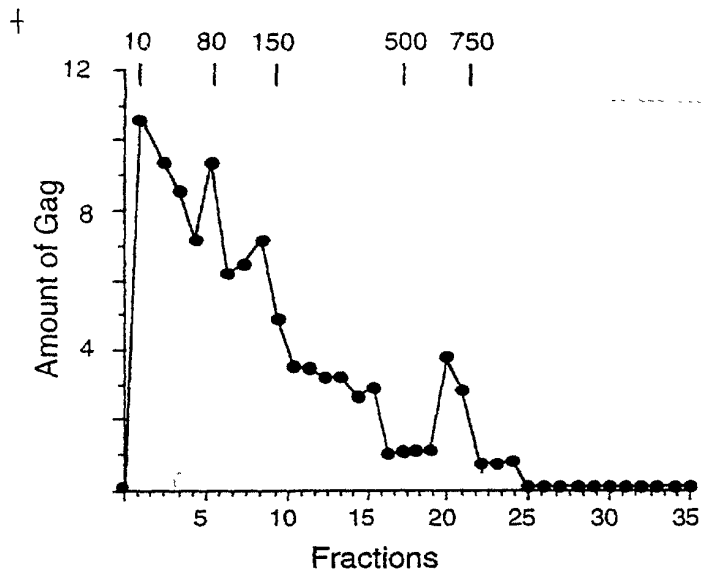


**Fig. 4A**

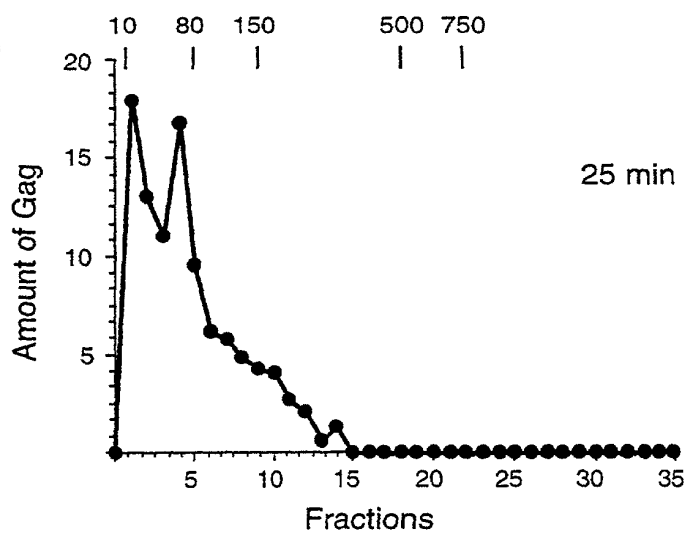


**Fig. 4B**

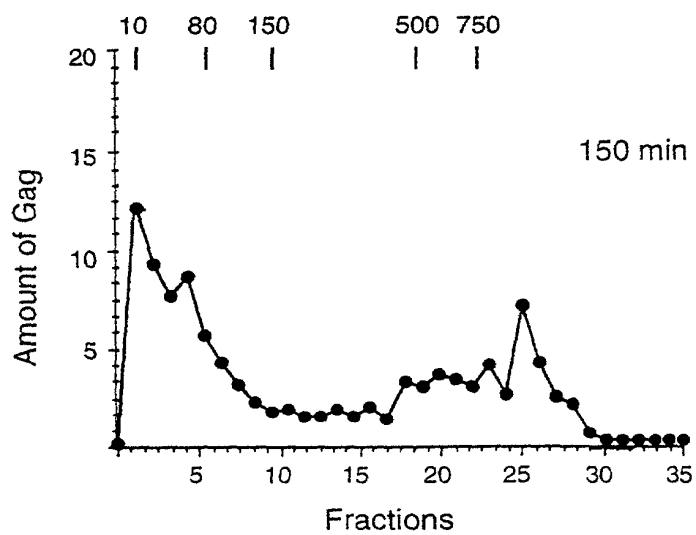
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**Fig. 5A**

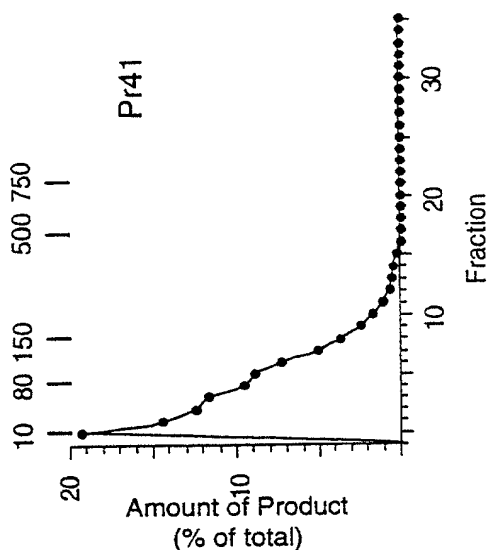


**Fig. 5B**

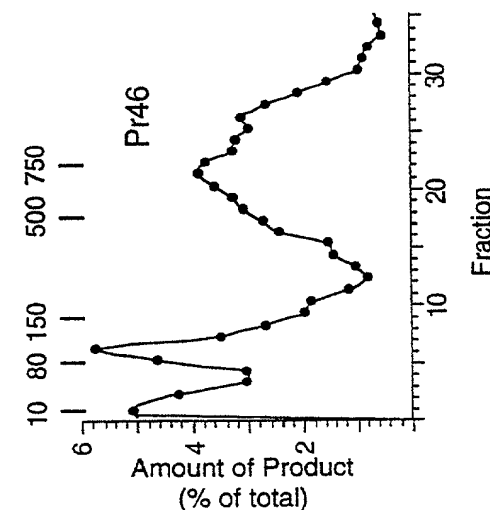


**Fig. 5C**

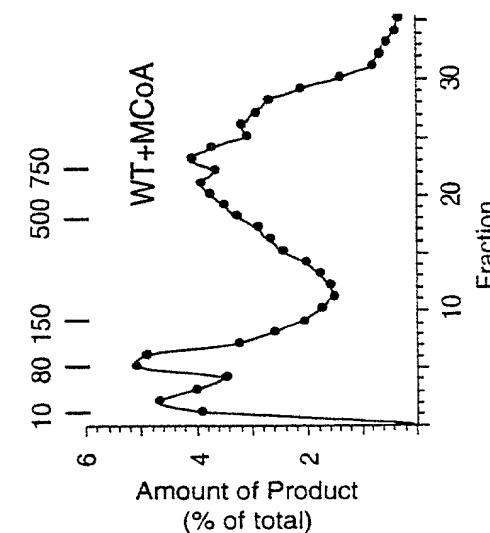
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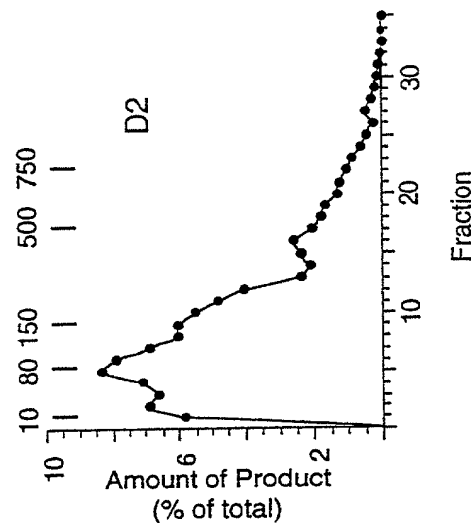
**Fig. 6A**



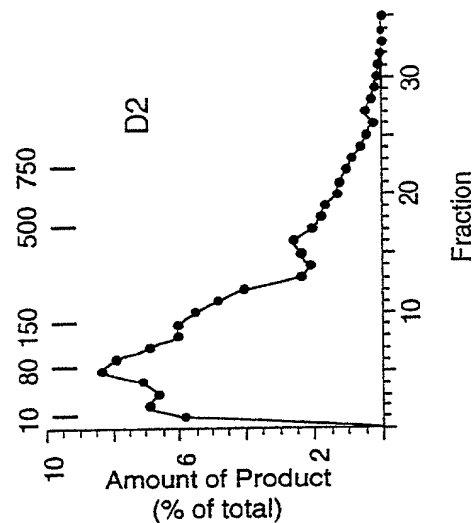
**Fig. 6B**



**Fig. 6C**



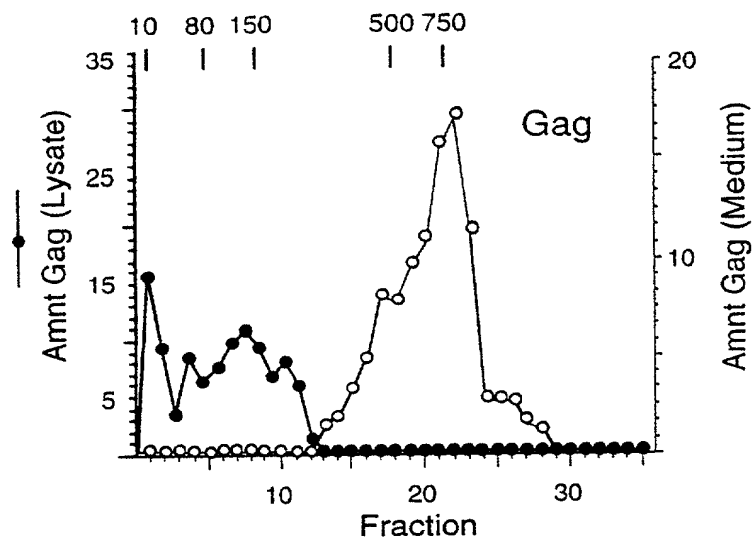
**Fig. 6D**



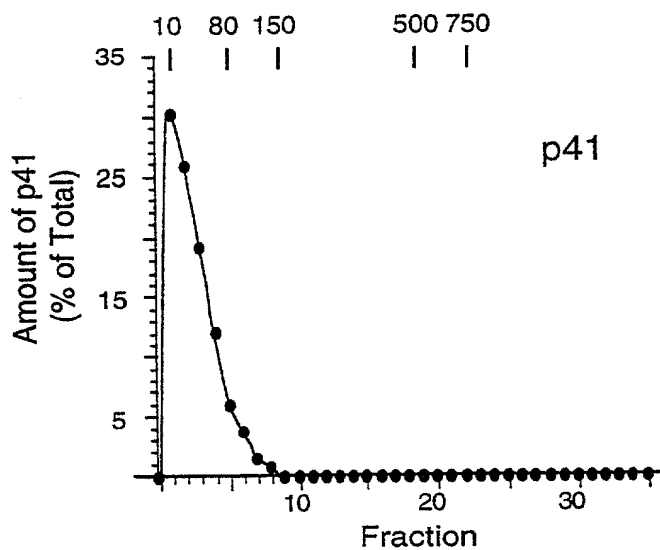
**Fig. 6E**

+

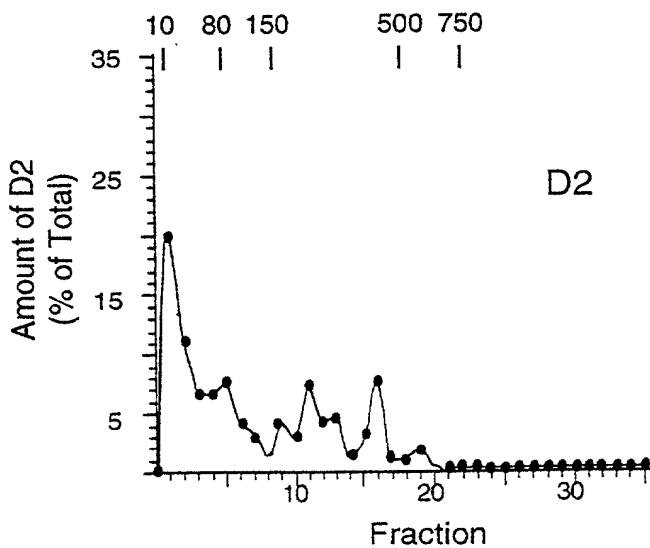
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**Fig. 7A**



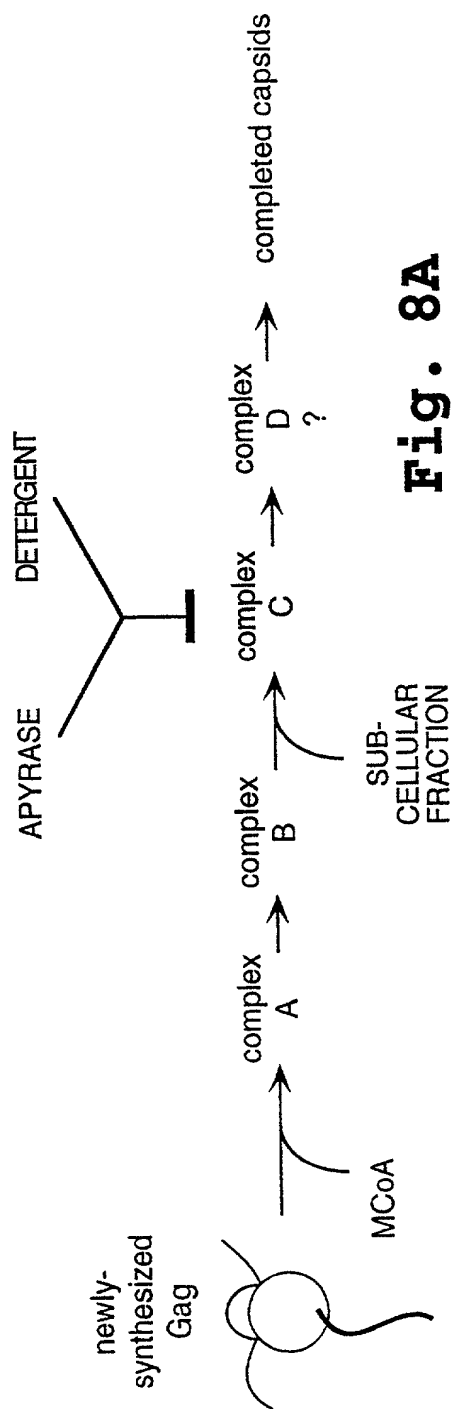
**Fig. 7B**



**Fig. 7C**

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+



**Fig. 8A**

**Fig. 8B**

p41

**Fig. 8C**

GAA  
WT-MCoA

**Fig. 8D**

D2

**Fig. 8E**

WT+MCoA  
p46

+



HuHP68 1 MADKLTRIAIVNHDCKPKKCRQECKKSCPVVVMGKLCIEVTPQSKIAWISETLCIGCGI  
 WGHP68 1 MADRLTRIAIVSEDKCKPKKCRQECKKSCPVVKTGKLCIEVSPVAKLAFISEELCIGCGI  
 consensus 1 \*\*.\*.\*\*\*\*\*.\*\*\*\*\*.\*\*\*\*\*.\*.\*.\*\*\*\*\*

HuHP68 61 CIKKCPFGALSIVNLPSNLEKETTHRYCANAFKLHRLPIPRPGEVLGLVGTNGIGKSAAL  
 WGHP68 61 CVKKCPFDAIEIINLPKDEKDTTHRYGPNTFKLHRLPVPRPGQVLGLVGTNGIGKSTAL  
 consensus 61 \*.\*\*\*\*\*.\*.\*.\*\*\*.\*\*\*.\*\*\*\*\*.\*\*\*\*\*\*.\*\*\*\*\*.\*\*\*\*\*.\*\*\*\*\*

HuHP68 121 KILAGKQKPNLKGYYDDPPDWQEILTYFRGSELQNYFTKILEDDLKAIKPYVARFLRLA  
 WGHP68 121 KVLAKGLKPNLGRFKNPPDWQEILTYFRGSELQNYFTRILEDNLKAIKPYVDHIPKAV  
 consensus 121 \*.\*\*\*\*\*.\*\*\*\*\*.\*\*\*\*\*.\*\*\*\*\*.\*\*\*\*\*.\*\*\*\*\*.\*\*\*\*\*.\*\*\*\*\*

HuHP68 181 KGTVGSILDRKDETKTQAIVCQQLDLTHLKERNVEDLSGGELQRFACAVVCIQKADIFMF  
 WGHP68 181 QGNVGQVLEQKDERDMKNELCVDLELNQVIDRNVGDLGGELQRFIAVAVVQSAEIMYF  
 consensus 181 \*.\*

HuHP68 241 DEPSSYLDVKQRLKAAITIRSLINPDRIIVVEHDLVLDYLSDFICCLYGVPSAYGVVT  
 WGHP68 241 DEPSSYLDVKQRLKAARVIRSLRSNSYVIVVEHDLVLDYLSDFICCLYKPGAYGVVT  
 consensus 241 \*\*\*\*\*.\*\*\*\*\*.\*\*\*\*\*.\*\*\*\*\*.\*\*\*\*\*.\*\*\*\*\*.\*\*\*\*\*.\*\*\*\*\*

HuHP68 301 MPFSVREGINIFLDGYVPTENLRFDRDASLVFKVAETAN-EEVKKMCMYKYPGKKKKMGE  
 WGHP68 301 LPFSVREGINIPLAGFVPTENLRFDRDESLTFKIAETQESAEVATYQRYKYPTMSKTQGN  
 consensus 301 \*\*\*\*\*.\*\*\*\*\*.\*\*\*\*\*.\*\*\*\*\*.\*\*\*\*\*.\*\*\*\*\*.\*\*\*\*\*.\*\*\*\*\*

HuHP68 360 FELAIAGEFTDSEIMVVLGNGTGKTTFIRMLAGRLKPD--EG--GEVPVLNVSYKPKQ  
 WGHP68 361 FKLSVVEGEFTDSQIVVVLGNGTGKTTFIRMLAGLLKPDTEGTEVEIPEFNVSYKPKQ  
 consensus 361 \*.\*

HuHP68 416 ISPKSTGSRVQLLHEKIRDAYTHPQFVTDVMKPLQIENIIDQEVQTLGGELQVRVRLRLC  
 WGHP68 421 ISPKFQHPVRHLLHKSIRDSYTHPQFVSDVMKPLQIEQLMDQEVINLSGGELQVRVALCLC  
 consensus 421 \*\*\*\*.\*

HuHP68 476 LGKPADVYLIDEPSAYLDSEQRLMAARVVKRFLHAKKTAFVVEHDFIMATYLADRVIVF  
 WGHP68 481 LGKPADIYLIDEPSAYLDSEQRIVASKVIKRFILHAKKTAFIVEHDFIMATYLADKVIVY  
 consensus 481 \*\*\*\*\*.\*\*\*\*\*.\*\*\*\*\*.\*.\*.\*.\*.\*.\*.\*.\*.\*.\*.\*.\*.\*.\*.\*.\*.\*

HuHP68 536 DGVPSKNTVANSPTLLAGMNKFLSQLEITFRDPNNYRPRINKLNSIKDVEQKSGNYF  
 WGHP68 541 EGLASIDCTANAPQSLVSGMNKFLSHLDITFRDPTNYRPRINKLESTKDREQKNAGSYY  
 consensus 541 \*.\*

HuHP68 596 FLDD  
 WGHP68 601 YLDD  
 consensus 601 \*\*\*

Figure 9

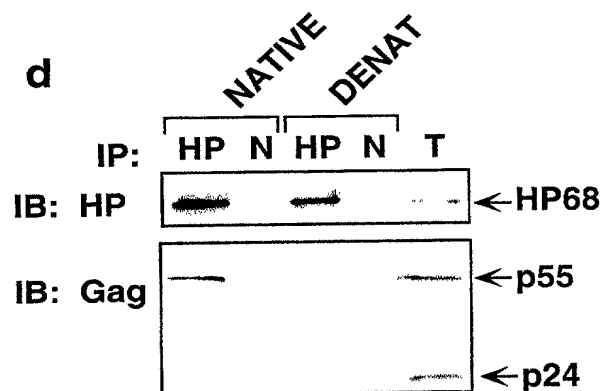
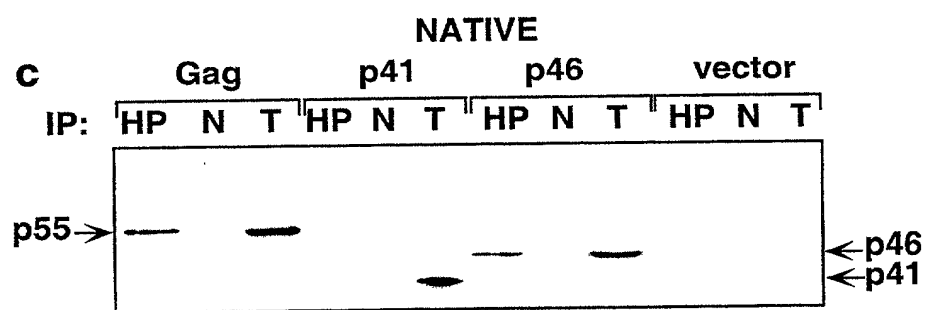
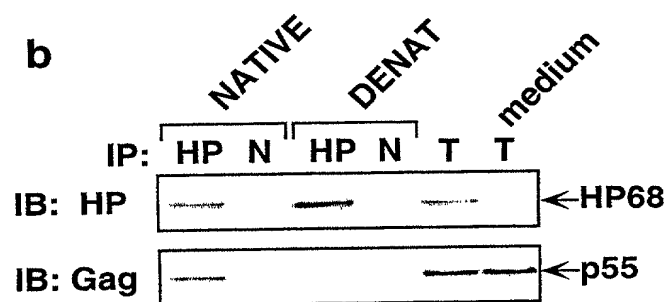
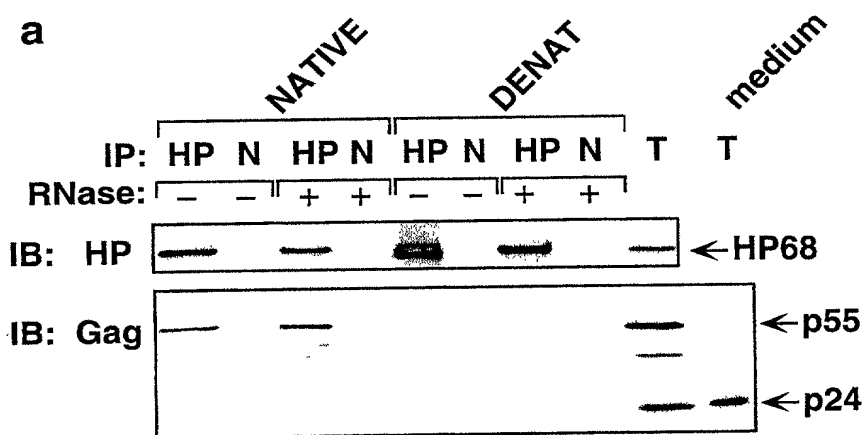


Figure 10

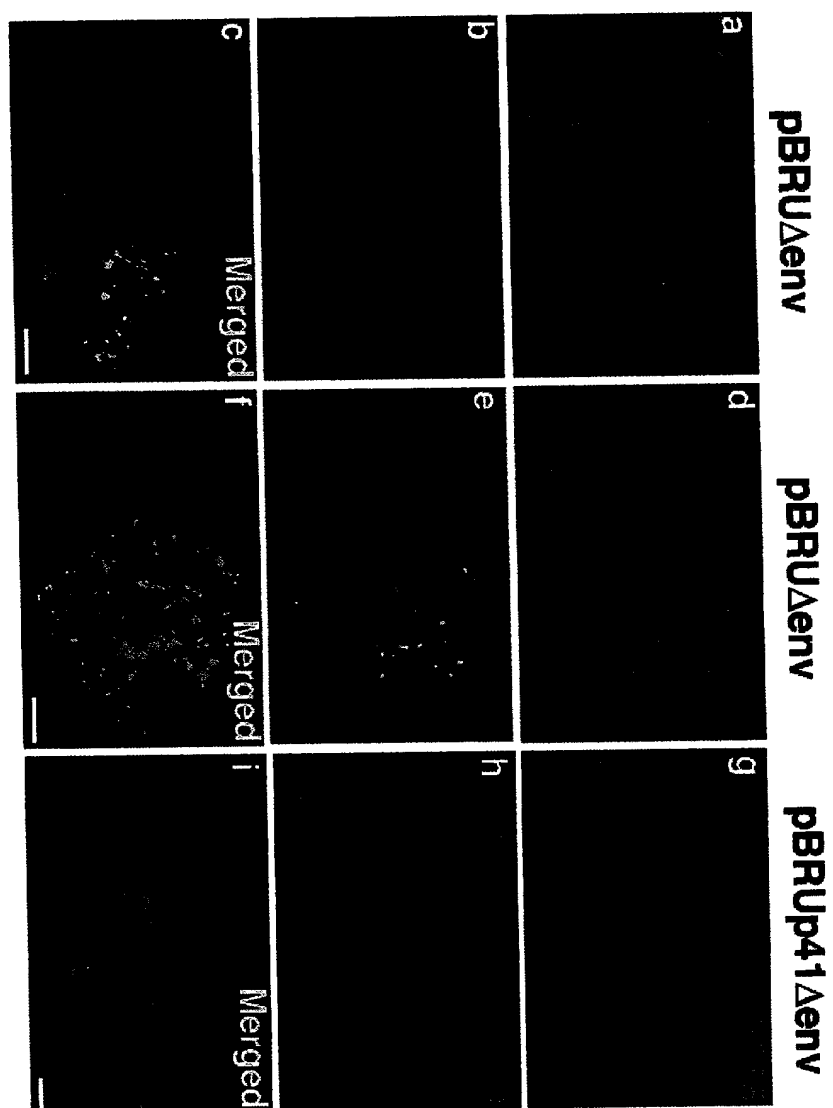


Figure 11

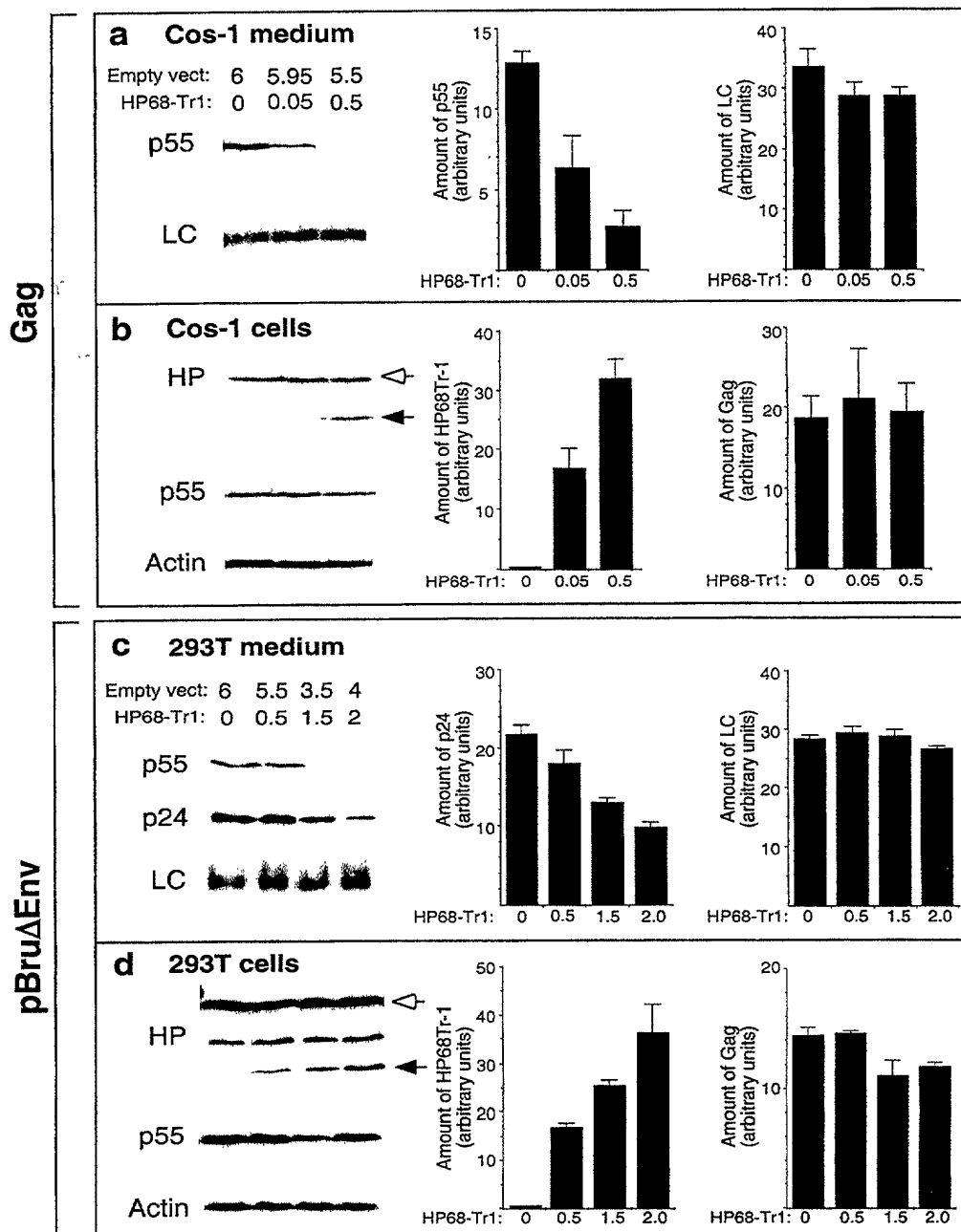


Figure 12

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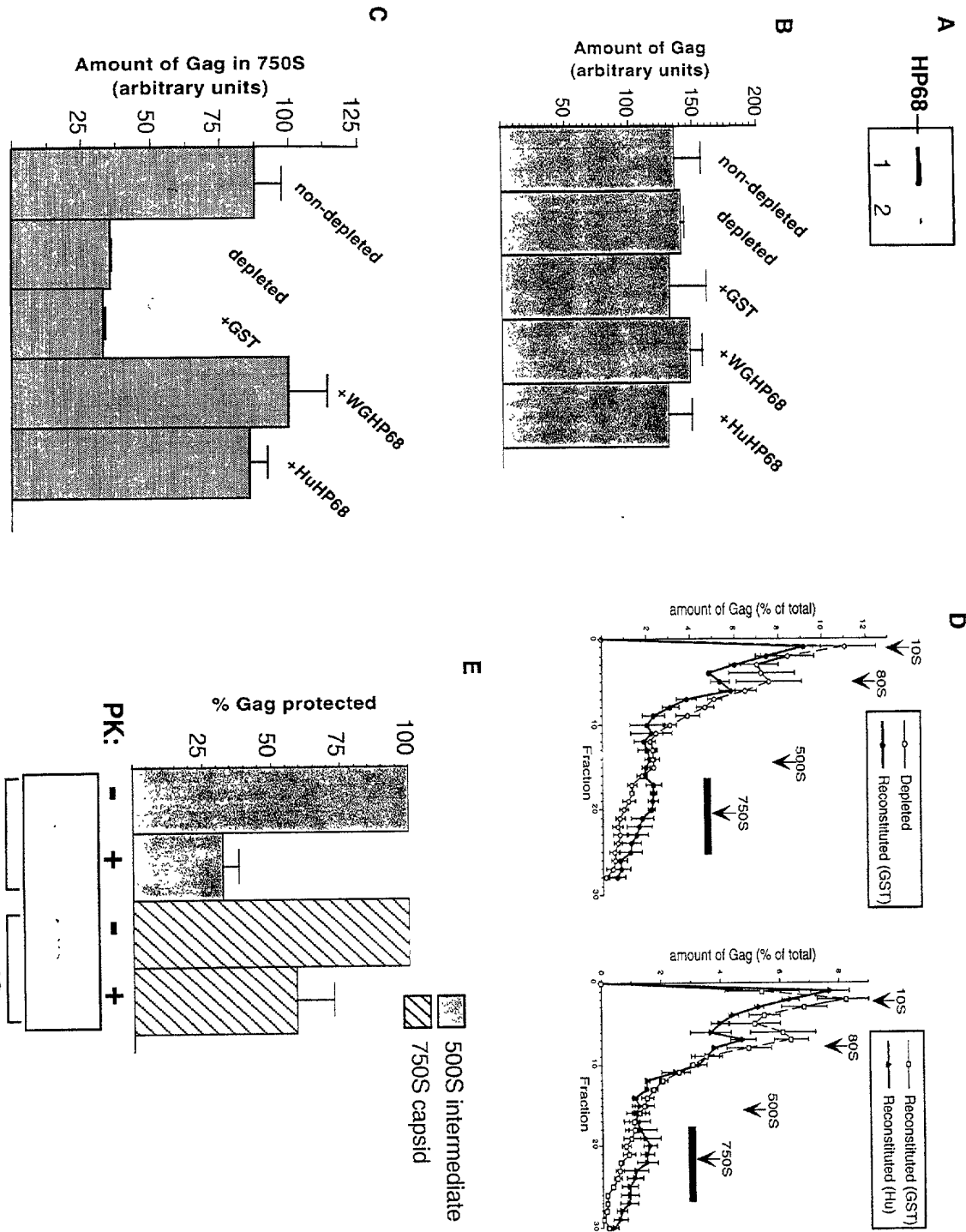


Figure 13

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+

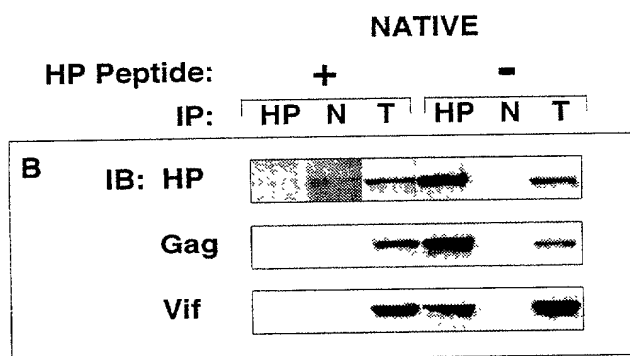
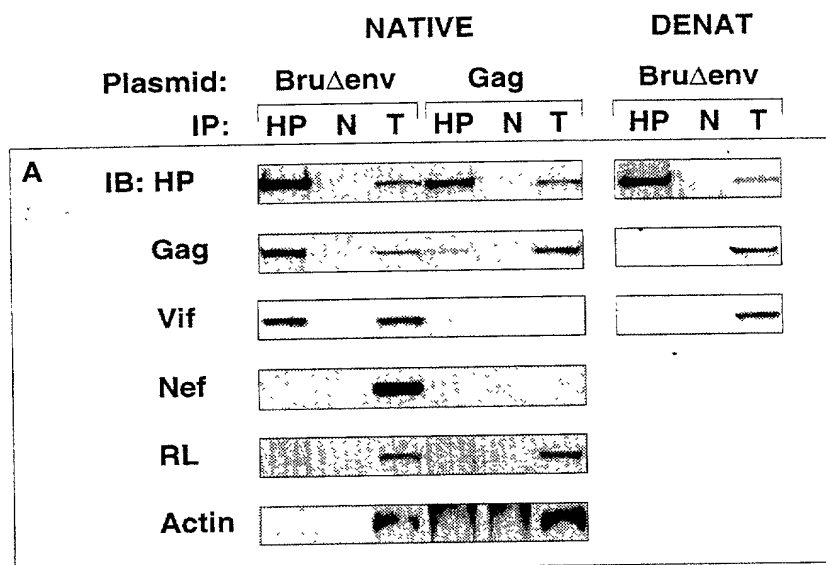


Figure 14

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